

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of the claims pending in this application:

Listing of Claims

1-80. (Canceled).

81. (Previously presented) An isolated nucleic acid molecule comprising the nucleic acid sequence:

(a)

CTGTATGTCAGCTTCCGAGACCTGGGCTGGCAGGACTGGATCATCGCGCCTG
AAGGCTACGCGCGCTACTACTGTGAGGGGGAGTGTGCCTTCCCTCTGAACTC
CTACATGAACGCCACCAACCACGCCATCGTGCAGACGCTGGTCCACTTCATC
AACCCGGAAACGGTGCCCAAGCCCTGCTGTGCGCCACGCAGCTCAATGCCA
TCTCCGTCCTCTACTTCGATGACAGCTCCAACGTCATCCTGAAGAAATACAGA
AACATGGTGGTCCGGGCCTGTGGCTGCCACTAGCTCCT (nucleotides 16-314 of
SEQ ID NO: 42), or

(b) encoding an amino acid sequence:

LYVSFRDLGWQDWIIAPEGYAAYYCEGECAFLNSYMNATNHAIVQTLV
HFINPETVPKPCCAPTQLNAISVLYFDDSSNVILKKYRNMVVRACGCH
(SEQ ID NO: 39), or a conservative amino acid variant thereof,

wherein said nucleic acid sequence encodes a protein competent to induce bone
and cartilage in a mammal.

82. (Previously presented) The isolated nucleic acid molecule of claim 81 comprising the nucleic acid sequence

TGTAAGAAGCACGAGCTGTATGTCAGCTTCCGAGACCTGGGCTGGCAGGACT
GGATCATCGCGCCTGAAGGCTACGCGCGCTACTACTGTGAGGGGGAGTGTGC
CTTCCCTCTGAACTCCTACATGAACGCCACCAACCACGCCATCGTGCAGACG

CTGGTCCACTTCATCAACCCGGAAACGGTGCCCAAGCCCTGCTGTGCGCCCA
CGCAGCTCAATGCCATCTCCGTCCTCTACTTCGATGACAGCTCCAACGTCATC
CTGAAGAAATACAGAAACATGGTGGTCCGGGCCTGTGGCTGCCACTAGCTCC
T (SEQ ID NO: 42),

or encoding an amino acid sequence:

CKKHELYVSFRDLGWQDWIIAPEGYAAYYCEGECAPLNSYMNATNHAIVQTL
VHFINPETVPKPCCAPTQLNAISVLYFDDSSNVILKKYRNMVVRACGCH (amino
acids 6-107 of SEQ ID NO: 9).

83. (Currently amended) The isolated nucleic acid molecule of claim 81 or 82, wherein said protein competent to induce bone and cartilage further comprises
- (a) a pair of unglycosylated polypeptide chains, each of said unglycosylated polypeptide chains having a molecular weight of about 14 kDa to 16 kDa, as determined by polyacrylamide gel electrophoresis under reducing conditions; or
 - (b) an unglycosylated dimeric protein having a molecular weight of about 27 kDa, as determined by polyacrylamide gel electrophoresis under non-reducing conditions.
84. (Cancelled)
85. (Cancelled)
86. (Cancelled)
87. (Currently amended) An isolated host cell transformed with the nucleic acid molecule of ~~any one of claims 81, or 82, 84, 85, or 86.~~
88. (Currently amended) ~~A~~The isolated host cell of claim 87, wherein said cell is a prokaryotic or an eukaryotic cell.
89. (Currently amended) The isolated host cell of claim 88, wherein said prokaryotic cell is an E.coli cell, and said eukaryotic cell is a Saccharomyces cell or a mammalian cell.
90. (Currently amended) The isolated nucleic acid molecule of any one of claims 81-~~86~~83, wherein the nucleic acid is DNA.

91. (Currently amended) The isolated host cell of any one of claims 87-89, wherein the nucleic acid is DNA.